

their own hands, drew the plummet up 50 fathoms several times, and after it had renewed its descent, it stopped, on each occasion, abruptly at the original mark to a fathom, and would not take another turn off the reel. The velocity with which the line run out was as follows:—

	h	m	s
The first 1000 fathoms in	0	27	15
1000 to 2000 fathoms in	0	39	40
2000 to 3000 fathoms in	0	48	10
3000 to 4000 fathoms in	1	13	39
4000 to 5000 fathoms in	1	27	06
5000 to 6000 fathoms in	1	45	25
6000 to 7000 fathoms in	1	49	15
7000 to 7706 fathoms in	1	14	15
	9	24	45

The whole time therefore taken by the plummet in descending through 7706 fathoms, or nearly 7·7 geographical miles of 60 to the degree, was 9^h 24^m 45^s. The highest summits of the Himalaya, Dhaulagiri and Kincheringa, are little more than 28,000 feet, or 4·7 geographical miles above the sea. The sea-bottom has therefore depths greatly exceeding the elevation of the highest pinnacle above its surface.

The strength of the line tried before the sounding was found to be equal to bear 72lbs. in air. The 7706 fathoms which ran out weighed, when dry, 77lbs., exclusive of the plummet, 9lbs. Great care was taken in the endeavour to bring the plummet again to the surface to show the nature of the bottom, but, whilst carefully reeling in, the line broke at 140 fathoms below the water-line, carrying away a Six's thermometer which had been bent on at 3000 fathoms.

A paper was also in part read, entitled “On the Eclipses of Agathocles, Thales and Xerxes.” By George B. Airy, Esq., F.R.S. &c., Astronomer Royal. Received December 15, 1852.

January 27, 1853.

The EARL OF ENNISKILLEN, V.P., in the Chair.

A letter was read giving an account of “An Explosive Meteorite.” By Francis Higginson, Esq., R.N. Communicated by Thomas Bell, Esq., Sec. R.S. &c. Received December 23, 1852.

The writer states that his attention having been aroused by the highly electrical state of the atmosphere during a severe gale of wind, he proceeded along the beach in the vicinity of Dover, at 2 A.M. on the morning of Friday, the 17th of December 1852.

It had blown very hard during the night, the wind veering from West to W.S.W., in occasional heavy squalls of rain and sleet, accompanied at intervals by faint flashing scintillations, which at

first, being considered sheet lightning, were only noticed from their unusual colour, a deep and sombre red. At about 4^h 50^m A.M., however, these flashes constantly emerging from a dense, triangular and very remarkable cloud in the S.E., which perceptibly increased in size with great rapidity, he was induced to observe it with minute attention. At 4^h 55^m A.M., Greenwich mean time, the cloud had assumed the form of a right-angled triangle, its hypotenuse, or longest side, tending east and west. At this instant he first heard a singular and extraordinary hissing sound in the air, not unlike that of a passing shot, which, although at first not very loud, was yet clearly distinguishable above the howling of the gale. At 5 A.M. the cloud had nearly doubled its original size, advancing steadily from the S.E. in a N.W. direction, or from nearly dead to leeward, towards the wind's eye; whilst the scintillations spoken of were emitted with increased rapidity. He also then first perceived in the centre of the cloud, a dull, red, obscure nucleus, or fire-ball, apparently about half the diameter of the moon, having a tail five or six times that length, from which the flashes mentioned were sent forth, of surpassing brilliancy, as the meteor clearly descended with great velocity through the air, accompanied by a detonating, hurtling, hissing sound, impossible to describe, yet resembling that which precedes the shock of an earthquake. At three minutes past five o'clock A.M., the meteor having apparently spanned the Channel from S.E. to N.W., upon approaching the land—evidently throwing off portions of its substance as it passed through the atmosphere—the nucleus suddenly exploded with a report similar to a very heavy clap of thunder, giving out an intensely brilliant light, which rendered the minutest objects distinctly visible, although it rained violently and the sky was obscured by dark and threatening clouds. The dense body of the meteorite seemed to fall in the water about half a mile from the land, as indicated by a great volume of spray, which rose foaming in the distance.

February 3, 1853.

COLONEL SABINE, R.A., Treasurer, V.P., in the Chair.

The following letters were read:—

MONSIEUR LE COMTE,

À Berlin, ce 30 Dec. 1852.

C'est avec la plus vive reconnaissance, je pourrais dire, avec le genre d'émotion que l'on éprouve lorsqu'on obtient un succès auquel on n'a pas cru devoir aspirer, que j'ai reçu la médaille Copley, le grand et noble prix que la Société Royale, sous le Présidence de Monsieur le Comte de Rosse, a daigné m'adjuger. Cette illustre Compagnie a voulu récompenser un zèle ardent pour les sciences, des travaux peu remarquables par leurs résultats, mais fortifiés, dans le cours d'une longue et laborieuse carrière, par la constance d'une courageuse assiduité. En vous suppliant, Monsieur le Comte, de